REMARKS

In the Official Action mailed on **1 May 2007**, the Examiner reviewed claims 1-24. Claims 1-24 were rejected under 35 U.S.C. § 101. Claims 3 and 5-13 were rejected under 35 U.S.C. § 112. Claims 9-10, 12, 18-19, 21 and 23 were rejected under 35 U.S.C. § 102 based on Parham et al. (USPN 6,879,564 hereinafter "Parham"). Claims 1-6, 11, 13, 14-17, 22 and 24 were rejected under 35 U.S.C. § 103(a) based on Parham, and Bertin et al. (USPN 5,940,372 hereinafter "Bertin").

Amendments to the Specification

In accordance with the Examiner's comments, Applicant has amended the specification to expressly disavow embodiments previously described as "computer instruction signals embodied in a transmission medium." Applicant respectfully submits that this amendment will overcome the rejection of claims 4 and 6 under 35 U.S.C. §101 as directed to non-statutory subject matter.

Rejections under 35 U.S.C. §101

Claims 1-24 are rejected under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. Examiner observes that the language of the claims, reciting an algorithm for selecting a routing path, does not constitute a tangible result. Applicant has amended independent claims 1, 4-6, and 14 provide the tangible result that the instant application teaches enabling efficient communication between a first and a second node in a network. Independent claims 7-9 and 18 have been canceled without prejudice. Applicant respectfully submits that these amendments overcome the rejection under 35 U.S.C. § 101.

Rejections under 35 U.S.C. §112

Claims 3 and 5-13 are rejected as being indefinite under 35 U.S.C. §112, second paragraph. Applicant has amended claims 3 and 5-6 to clarify that the paths are between **nodes that are identified by** node identifiers, as specified in the language of the claims. Claims 7-13 have been canceled without due prejudice. Applicant respectfully submits that these amendments overcome the rejections under 35 U.S.C. §112, second paragraph.

Rejections under 35 U.S.C. §102

Claims 9-10, 12, 18-19, 21, and 23 are rejected as being anticipated by Parham et al. Applicant has canceled claims 9, 10, 12, 18-24 without due prejudice.

Rejections under 35 U.S.C. § 103(a)

Claims 1-6, 11, 13, 14-17, 22 and 24 are rejected under 35 U. S. C. §103(a) as being unpatentable over Parham in view of Bertin. Applicant respectfully disagrees since Bertin and the instant application disclose different approaches for determining the zone weights from which the optimal path weight is determined.

Applicant respectfully submits that Bertin discloses selecting paths by weighing each transmission link with a weighing function **that is dependent on reserved and non-reserved network traffic**, and selecting an optimal path that selects links with the lowest weight (see col. 6, lines 28-45 of Bertin). Thus, the weight disclosed in Bertin is a **measure of the network congestion**, both ongoing congestion as well as potential congestion (based on the reserved bandwidth). If there is no reserved bandwidth, then the weight is a measure purely of the current network traffic characteristics.

In contrast, the present invention teaches a weight function at a fault zone that **calculates the number of routing paths** that go through the fault zone (see

page 6, lines 3-26 to page 7, lines 1-25 of the specification). This is **independent of the network traffic** at any given instant, since it particularly identifies the **potential load on various nodes as a result of the particular network path configuration**.

This is beneficial because this measure can identify those nodes that **may get overloaded** purely as a result of the particular network configuration chosen, such as a node that is a bottleneck in the communication between two opposite parts of the network because all routing paths between the two parts of the network go through this node. *Irrespective of the current traffic characteristics*, failure of that node can affect the communication in the network significantly. Note that while network traffic congestion statistics can give a good measure of the currently overloaded nodes such as described above, the measure taught in the present invention enables us **to predict this merely from the network path configuration in a topology database at a node, rather than using the current traffic characteristics across the network**.

Applicant respectfully points out that there is nothing within the combined system of Parham and Bertin, either explicit or implicit, which suggests the use of the topology information to determine the number of routing paths that pass through a fault zone. It is not possible to use the combined system of Parham and Bertin to **predict the possible load at a node** prior to the onset of actual network traffic.

Accordingly Applicant has amended the independent claims 1, 4-6, and 14 to clarify that the zone weight is determined from the path configuration of the subnet or network prior to the communication. This finds support in page 6, lines 3-26 to page 7, lines 1-25 of the specification. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 4-6, and 14, as presently amended are in condition for allowance. Applicant also submits that claims 2-3, which depend upon claim 1, and claims 15-17, which depend

upon claim 14, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

By /Shun Yao/
Shun Yao
Registration No. 59,242

Date: 30 July 2007

Shun Yao
PARK, VAUGHAN & FLEMING LLP
2820 Fifth Street
Davis, CA 95618-7759
Tel: (530) 759-1667
Fax: (530) 759-1665
Email: shun@parklegal.com